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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/598,337

**Applicant(s)**

KIM ET AL.

**Examiner**

EDWARD CHANG

**Art Unit**

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 08/24/2008
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Status of Claims**

1. This action is in reply to the application filed on 24<sup>th</sup> of August 2006.
2. Claims 1-24 are currently pending and have been examined.

### **Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Examiner's Note:** The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

5. Claims 1, 11, and 15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen (US 5,845,267) in view of McNair (US 2001/0037297 A1).

**As per Claims 1, 11, and 15:**

Ronen as shown discloses the following limitations:

- *a receipt management database for managing at least information on payers who have to pay and payment amount that the respective payers have to pay for a certain period; and* (See at least Fig. 1, 127)
- *a payee server including an information extracting part for extracting information including information on the payers and the payment amount from the receipt management database,* (See at least Fig. 1, 126)
- *a bill transmitting part for transmitting the bill for payment to a receiver of the payer, and* (See at least Column 7, Line 22+, "...Billing server to properly bill each user...")
- *a controller receiving information on the payers who have completed a payment from a financial institution server.* (See at least Column 2, Line 54+, "...At the conclusion of transaction, the billing information is provided...")

However, Ronen specifically does not mention the following limitations. But McNair discloses the following limitations:

- *a code converting part for converting the extracted information into a two-dimensional (2D) code,* (See at least Page 3, Paragraph 0048+, "...encode the data into a barcode processing instruction...")
- *a bill forming part for making out a bill for payment with the converted 2D code attached thereto,* (See at least Fig. 2, Item 42, 46)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by McNair's billing system

aided by scanner to use the 2D code as part of the bill. This simplifies the billing process and greatly increases the effectiveness of the system.

6. Claims 2-4, 8-9, 13-14, 16-18, and 22 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen (US 5,845,267) in view of Senez (US 7,200,551 B1) in further view of McNair (US 2001/0037297 A1).

**As per Claims 2 and 16:**

Ronen as shown discloses the following limitations:

- *a receipt management database for managing at least information on payers who have to pay and payment amount that the respective payers have to pay for a certain period; and* (See at least Fig. 1, 127)
- *a payee server including an information extracting part for extracting information including information on the payers and the payment amount from the receipt management database,* (See at least Fig. 1, 126)
- *a bill transmitting part for transmitting the bill for payment to a receiver of the payer, and* (See at least Column 7, Line 22+, "...Billing server to properly bill each user...")
- *a controller receiving information on the payers who have completed a payment from a financial institution server* (See at least Column 2, Line 54+, "...At the conclusion of transaction, the billing information is provided...")

However, Ronen discloses using a transaction server but it specifically does not mention using a relay server. But it is commonly known in the network art to use multiple servers including a relay server. This is also clearly shown by Senez.

- *via a relay server.* (See at least Fig. 1)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Senez's automated

billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system. Also, combination of Ronen/Senez specifically does not mention the following limitations. But McNair discloses the following limitations:

- *a code converting part for converting the extracted information into a two-dimensional (2D) code, (See at least Page 3, Paragraph 0048+, "...encode the data into a barcode processing instruction...")*
- *a bill forming part for making out a bill for payment with the converted 2D code attached thereto, (See at least Fig. 2, Item 42, 46)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez's billing system as taught by McNair's billing system aided by scanner to use the 2D code as part of the bill. This simplifies the billing process and greatly increases the effectiveness of the system.

**As per Claims 3 and 17:**

Ronen as shown discloses the following limitations:

- *a receipt management database for managing at least information on payers who have to pay and payment amount that the respective payers have to pay for a certain period; and (See at least Fig. 1, 127)*
- *a payee server including an information extracting part for extracting information including the information on the payers and the payment amount from the receipt management database, (See at least Fig. 1, 126)*
- *a bill transmitting part for transmitting the bill for payment to a receiver of the payer, and (See at least Column 7, Line 22+, "...Billing server to properly bill each user...")*
- *a controller receiving information from a management server, (See at least Column 2, Line 54+, "...At the conclusion of transaction, the billing information is provided...")*

- *wherein information received from the management server is re-processed information of the information on the payer who have completed the payment, (See at least Column 5, Line 49+, "...once having received the identity of the user, contacts the billing server ...")*

However, Ronen discloses using a transaction server but it specifically does not mention using a relay server. But it is commonly known in the network art to use multiple servers including a relay server. This is also clearly shown by Senez.

- *which is provided from the financial institution server to the management server via a relay server. (See at least Fig. 1)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system. Also, combination of Ronen/Senez specifically does not mention the following limitations. But McNair discloses the following limitations:

- *a code converting part for converting the extracted information into a two-dimensional (2D) code, (See at least Page 3, Paragraph 0048+, "...encode the data into a barcode processing instruction...")*
- *a bill forming part for making out a bill for payment with the converted 2D code attached thereto, (See at least Fig. 2, Item 42, 46)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez's billing system as taught by McNair's billing system aided by scanner to use the 2D code as part of the bill. This simplifies the billing process and greatly increases the effectiveness of the system.

**As per Claims 4 and 18:**

Ronen as shown discloses the following limitations:

- *a receipt management database for managing at least information on payers who have to pay and payment amount that the respective payers have to pay for a certain period; and (See at least Fig. 1, 127)*
- *a payee server including an information extracting part for extracting information including the information on the payers and the payment amount from the receipt management database, (See at least Fig. 1, 126)*
- *a bill transmitting part for transmitting the bill for payment to a receiver of the payer, and (See at least Column 7, Line 22+, "...Billing server to properly bill each user...")*
- *a controller receiving information on the payers who have completed the payment from a financial institution server via a relay server, (See at least Column 2, Line 54+, "...At the conclusion of transaction, the billing information is provided...")*
- *providing the received information on the payers to a management server, and (See at least Fig. 1, 121)*
- *receiving re-processed information of the received information in a certain form from the management server. (See at least Column 5, Line 49+, "...once having received the identity of the user, contacts the billing server ..."); (Also see Column 1, Line 18+, "...digital format...")*

However, Ronen discloses using a transaction server but it specifically does not mention using a relay server. But it is commonly known in the network art to use multiple servers including a relay server. This is also clearly shown by Senez.

- *via a relay server. (See at least Fig. 1)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Senez's automated



billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system. Also, combination of Ronen/Senez specifically does not mention the following limitations. But McNair discloses the following limitations:

- *a code converting part for converting the extracted information into a two-dimensional (2D) code, (See at least Page 3, Paragraph 0048+, "...encode the data into a barcode processing instruction...")*
- *a bill forming part for making out a bill for payment with the converted 2D code attached thereto, (See at least Fig. 2, Item 42, 46)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez's billing system as taught by McNair's billing system aided by scanner to use the 2D code as part of the bill. This simplifies the billing process and greatly increases the effectiveness of the system.

**As per Claims 8 and 22:**

Combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above. Furthermore, Senez also discloses the following limitations:

- *wherein the payer information provided from the relay server to the controller is information processed in the relay server. (See at least Fig. 1, Clearing House acting as relay server processes the information from the financial institution and delivers it to Billing Processing Server)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez/McNair's billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system.

**As per Claim 9:**

Combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above.

Furthermore, Senez also discloses the following limitations:

- *wherein the information that the management server receives from the relay server is information first-processed by the relay server. (See at least Fig. 1, Clearing House acting as relay server processes the information and delivers it to Billing Processing Server, it is first processed because there is no server between the relay server and the bill processing server)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez/McNair's billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system.

**As per Claim 13:**

Combination of Ronen/McNair discloses the limitations as shown in the rejections above. In addition, Senez discloses the following limitations:

- *wherein the relay server provides the payer information provided from the financial institution server to a management server which re-processes information provided from the relay server in a certain form, and transmits re-processed information to the payee server. (See at least Fig. 1, Item 16, 11, 12, Clearing house = relay server)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez/McNair's billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra

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processing power to further process the necessary data. This would ultimately increase the efficiency of the system.

**As per Claim 14:**

Combination of Ronen/McNair discloses the limitations as shown in the rejections above. In addition, Senez discloses the following limitations:

- *wherein the relay server further comprises a information processing part which process the information received from the financial institution server, and the management server receives the processed information by the relay server. (See at least Column 7, Line 0052+, "...which facilitates the debiting and crediting information...")*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez/McNair's billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system.

7. Claims 5-7, 12, and 19-21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen/McNair or Ronen/Senez/McNair in further view of Antognini et al. (hereinafter "Antognini"); (US 2002/0023055 A1).

**As per Claims 5, 12, and 19:**

Combination of Ronen/McNair or combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above. However they don't disclose the following limitations. But, Antognini discloses the following limitations:

- *wherein when an automated teller machine (ATM) is provided with the bill for payment and payment means from the respective payers, (See at least Page 7, Paragraph 0062+, "...take those bills to an ATM...")*

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- *and scans and decodes the 2D code of the bill, the financial institution server implements a payment process using the decoded information and the payment means provided from the ATM, and transfers the paid payment amount to an account of the payee.* (See at least Page 7, Paragraph 0062+, "...ATM's scanner...", it does not specifically state 2D code, but 2D code is just one form of digital data mentioned by Antognini)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/ McNair's internet billing system as taught by Antognini's billing system aided by scanner to use the ATM with the scanner to process the billing. This would help payers to easily make necessary payments on time with their near by ATM.

**As per Claims 6 and 20:**

Combination of Ronen/McNair discloses the limitations as shown in the rejections above. However Ronen/McNair doesn't disclose the following limitations. But, Antognini discloses the following limitations:

- *wherein the payer information provided from the financial institution server to the controller is either the 2D code attached to the bill for payment or decoded information of the 2D code attached to the bill for payment.* (See at least Page 5, Paragraph 0053+, "...electronic mail with an attachment that contains digital information...")

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/ McNair's internet billing system as taught by Antognini's billing system aided by scanner to use the ATM with the scanner to process the billing. This would help payers to easily make necessary payments on time with their near by ATM.

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**As per Claims 7 and 21:**

Combination of Ronen/McNair discloses the limitations as shown in the rejections above. However Ronen/McNair doesn't disclose the following limitations. But, Antognini discloses the following limitations:

- *wherein the payer information provided from the financial institution server to the relay server is either the 2D code attached to the bill for payment or decoded information of the 2D code attached to the bill for payment. (See at least Page 5, Paragraph 0053+, "...electronic mail with an attachment that contains digital information...")*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/ McNair's internet billing system as taught by Antognini's billing system aided by scanner to use the ATM with the scanner to process the billing. This would help payers to easily make necessary payments on time with their near by ATM.

8. Claims 10 and 23 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen/McNair or Ronen/Senez/McNair in further view of Kitchen et al. (hereinafter "Kitchen"); (US 6,289,322 B1).

**As per Claims 10 and 23:**

Combination of Ronen/McNair or combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above. However they don't disclose the following limitations. But, Kitchen discloses the following limitations:

- *wherein the payee server further carries out a function of making out a notice of arrears when the payee server has not been provided with payer information until the payment due date, and transmitting the notice of arrears to the receiver of the payer. (See at least Page 10, Paragraph 0045+, "...reminder notice could be sent...", although it does not specifically wait until the payment due date (instead it is sent just prior to due date), but*

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this is a obvious modification of the art because it is common practice to send a notice when the payment is late.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/ McNair's internet billing system as taught by Kitchen's electronic billing system to message the payer when the payment is late. This would help alert the payers to make necessary payments to avoid late fees.

9. Claim 24 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen/Senez/McNair in further view of Budow et al. (hereinafter "Budow"); (US 5,661,517).

**As per Claim 24:**

Combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above. However Ronen/Senez/McNair doesn't disclose the following limitations. But, Budow discloses the following limitations:

- *in the payment process, the steps of comparing the payment amount that the respective payers have to pay for a certain period among decoded information with the total amount payable from payment means; if the payment amount is the same as or less than the total amount, subtracting the money corresponding to the payment amount from payment means and displaying a screen of the ATM a message informing of a normal completion of payment; and if the payment amount is greater than the total amount, displaying the screen a message informing of payment disable is implemented.* (See at least Column 26, Line 66+, "...account (debit or ATM)...inform the customer that the debit card account has insufficient funds...", if TV could display the information, than it is obvious and well know in the art to have ATM display such information); (Also see at least Column 16, Line 36+, "...transmit screens notifying the customer that card was approved and that the transaction is being completed...")

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Budow's billing system to let the user know if there is sufficient or insufficient fund in the account to pay the bill. This would help users to effectively manage their accounts.

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**Conclusion**

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Edward Chang** whose telephone number is **571.270.3092**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Kambiz Abdi** can be reached at **571.272.6702**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

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October 9, 2008

/Edward Chang/ Examiner, Art Unit 3692

/Susanna M. Diaz/

Primary Examiner, Art Unit 3692